

CURRENT CLAIMS

1-53. (Previously cancelled).

54. (Previously Presented) A method for managing a storage area network (SAN), the method comprising:

defining storage domains respectively having associated configurable storage management properties that are separate from individual physical capabilities of physical storage resources available through the SAN, wherein a first set of storage management properties is associated with a first storage domain and a second set of storage management properties is associated with a second storage domain, with the first set of storage management properties being different from the second set of storage management properties;

accommodating the creation of logical volumes configurable for presentation to hosts through the SAN; and

allocating the logical volumes to hosts in the context of the storage domains, wherein allocating a first logical volume to a first host in the context of the first storage domain entails the provision of storage resources according to the first set of storage management properties and allocating a second volume to a second host in the context of the second storage domain entails the provision of storage resources according to the second set of storage management properties.

55. (Previously Presented) The method of claim 54, wherein presentation of logical volumes to hosts accommodates storage resource access by hosts without requiring hosts to be configured according to the requirements of the physical storage resources.

56. (Previously Presented) The method of claim 55, wherein the first logical volume and the second logical volume are a common logical volume, with allocation of the common logical volume to the first host subject to the first set of storage management properties and allocation of the common logical volume to the second host subject to the second set of storage management properties.

57. (Previously Presented) The method of claim 54, wherein the storage management properties comprise a guaranteed storage capacity.

58. (Previously Presented) The method of claim 54, wherein the storage management properties comprise a guaranteed I/O properties that include an I/O bandwidth and/or an I/O operations.

59. (Previously Presented) The method of claim 54, wherein the storage management properties comprise a guaranteed availability.

60. (Previously Presented) The method of claim 54, wherein the storage management properties comprise a guaranteed performance.

61. (Previously Presented) The method of claim 54, wherein the storage management properties comprise a guaranteed integrity.

62. (Previously Presented) A computer program product for managing a storage area network (SAN), the computer program product stored on a computer readable medium and adapted to perform operations comprising:

defining storage domains respectively having associated configurable storage management properties that are separate from individual physical capabilities of physical storage resources available through the SAN, wherein a first set of storage management properties is associated with a first storage domain and a

second set of storage management properties is associated with a second storage domain, with the first set of storage management properties being different from the second set of storage management properties; accommodating the creation of logical volumes configurable for presentation to hosts through the SAN; and allocating the logical volumes to hosts in the context of the storage domains, wherein allocating a first logical volume to a first host in the context of the first storage domain entails the provision of storage resources according to the first set of storage management properties and allocating a second volume to a second host in the context of the second storage domain entails the provision of storage resources according to the second set of storage management properties.

63. (Previously Presented) The computer program product of claim 62, wherein presentation of logical volumes to hosts accommodates storage resource access by hosts without requiring hosts to be configured according to the requirements of the physical storage resources.

64. (Previously Presented) The computer program product of claim 63, wherein the first logical volume and the second logical volume are a common logical volume, with allocation of the common logical volume to the first host subject to the first set of storage management properties and allocation of the common logical volume to the second host subject to the second set of storage management properties.

65. (Previously Presented) The computer program product of claim 62, wherein the storage management properties comprise a guaranteed storage capacity.

66. (Previously Presented) The computer program product of claim 62, wherein the storage management properties comprise a guaranteed I/O properties that include an I/O bandwidth and/or an I/O operations.

67. (Previously Presented) The computer program product of claim 62, wherein the storage management properties comprise a guaranteed availability.

68. (Previously Presented) The computer program product of claim 62, wherein the storage management properties comprise a guaranteed performance.

69. (Previously Presented) The computer program product of claim 62, wherein the storage management properties comprise a guaranteed integrity.

70. (Previously Presented) An apparatus for managing a storage area network (SAN), the apparatus comprising:

means for defining storage domains respectively having associated configurable storage management properties that are separate from individual physical capabilities of physical storage resources available through the SAN, wherein a first set of storage management properties is associated with a first storage domain and a second set of storage management properties is associated with a second storage domain, with the first set of storage management properties being different from the second set of storage management properties;

means for accommodating the creation of logical volumes configurable for presentation to hosts through the SAN; and

means for allocating the logical volumes to hosts in the context of the storage domains, wherein allocating a first logical volume to a first host in the context of the first storage domain entails the provision of storage resources according to the first

set of storage management properties and allocating a second volume to a second host in the context of the second storage domain entails the provision of storage resources according to the second set of storage management properties.

71. (Previously Presented) The apparatus of claim 70, wherein presentation of logical volumes to hosts accommodates storage resource access by hosts without requiring hosts to be configured according to the requirements of the physical storage resources.
72. (Previously Presented) The apparatus of claim 71, wherein the first logical volume and the second logical volume are a common logical volume, with allocation of the common logical volume to the first host subject to the first set of storage management properties and allocation of the common logical volume to the second host subject to the second set of storage management properties.
73. (Previously Presented) The apparatus of claim 70, wherein the storage management properties comprise a guaranteed storage capacity.
74. (Previously Presented) The apparatus of claim 70, wherein the storage management properties comprise a guaranteed I/O properties that include an I/O bandwidth and/or an I/O operations.
75. (Previously Presented) The apparatus of claim 70, wherein the storage management properties comprise a guaranteed availability.
76. (Previously Presented) The apparatus of claim 70, wherein the storage management properties comprise a guaranteed performance.
77. (Previously Presented) The apparatus of claim 70, wherein the storage management properties comprise a guaranteed integrity.

78. (Previously Presented) A storage area network (SAN) that accommodates presentation of logical volumes to hosts and associates access to storage with configurable storage management properties defined by a storage domain, the storage area network comprising:

storage domains respectively defined to have associated configurable storage management properties that are separate from individual physical capabilities of physical storage resources available through the SAN, wherein a first set of storage management properties is associated with a first storage domain and a second set of storage management properties is associated with a second storage domain, with the first set of storage management properties being different from the second set of storage management properties;

logical volumes configurable for presentation to hosts through the SAN; and means for allocating the logical volumes to hosts in the context of the storage domains, wherein allocating a first logical volume to a first host in the context of the first storage domain entails the provision of storage resources according to the first set of storage management properties and allocating a second volume to a second host in the context of the second storage domain entails the provision of storage resources according to the second set of storage management properties.

79. (Previously Presented) The SAN of claim 78, wherein presentation of logical volumes to hosts accommodates storage resource access by hosts without requiring hosts to be configured according to the requirements of the physical storage resources.

80. (Previously Presented) The SAN of claim 79, wherein the first logical volume and the second logical volume are a common logical volume, with allocation of the common logical volume to the first host subject to the first set of storage management properties and allocation of

the common logical volume to the second host subject to the second set of storage management properties.

81. (Previously Presented) The SAN of claim 78, wherein the storage management properties comprise a guaranteed storage capacity.

82. (Previously Presented) The SAN of claim 78, wherein the storage management properties comprise a guaranteed I/O properties that include an I/O bandwidth and/or an I/O operations.

83. (Previously Presented) The SAN of claim 78, wherein the storage management properties comprise a guaranteed availability.

84. (Previously Presented) The SAN of claim 78, wherein the storage management properties comprise a guaranteed performance.

85. (Previously Presented) The SAN of claim 78, wherein the storage management properties comprise a guaranteed integrity.

86. (Previously Presented) The method of claim 56, wherein the first set of storage management properties includes a first class of service and the second set of storage management properties including a second class of service, whereby access of the common volume by the first and second hosts entails differing classes of service.

87. (Previously Presented) The method of claim 54, wherein the first and second sets of storage management properties are softly configured such that they are reconfigurable without requiring an update of the connections to the physical storage resources.

88. (Previously Presented) The computer program product of claim 64, wherein the first set of storage management properties includes a first class of service and the second set of storage management properties including a second class of service, whereby access of the common volume by the first and second hosts entails differing classes of service.

89. (Previously Presented) The computer program product of claim 62, wherein the first and second sets of storage management properties are softly configured such that they are reconfigurable without requiring an update of the connections to the physical storage resources.

90. (Previously Presented) The apparatus of claim 70, wherein the first set of storage management properties includes a first class of service and the second set of storage management properties including a second class of service, whereby access of the common volume by the first and second hosts entails differing classes of service.

91. (Previously Presented) The SAN of claim 80, wherein the first set of storage management properties includes a first class of service and the second set of storage management properties including a second class of service, whereby access of the common volume by the first and second hosts entails differing classes of service.

92. (Previously Presented) The SAN of claim 78, wherein the first and second sets of storage management properties are softly configured such that they are reconfigurable without requiring an update of the connections to the physical storage resources.